Index of Claims



| Application No. | Applicant(s)   |    |
|-----------------|----------------|----|
| 10/615,015      | HIGUCHI ET AL. | 14 |
| Examiner        | Art Unit       |    |
| DHIRU R PATEL   | 2831           |    |

√ Rejected
= Allowed

- (Through numeral)
Cancelled

+ Restricted

Non-Elected

I Interference

A Appeal
O . Objected

| CI       | aim      | Date     |  |  |  |              |           |              |           | Cla       | aim       | Date              |          |          |          |          |          |          | CI       | aim    | Date   |                 |               |                   |          |                |          |        |          |                |                 |              |  |
|----------|----------|----------|--|--|--|--------------|-----------|--------------|-----------|-----------|-----------|-------------------|----------|----------|----------|----------|----------|----------|----------|--------|--------|-----------------|---------------|-------------------|----------|----------------|----------|--------|----------|----------------|-----------------|--------------|--|
|          |          | 12/12/03 |  |  |  |              |           |              |           |           |           | Π                 |          |          |          |          |          | Τ        | Т        | 1      |        | 1               |               |                   | Т        | Ť              | T        | Τ      | Т        | Т              |                 |              |  |
| Final    | Original | Ž        | •  |  |  |              |           |              |           |           |           |                   | Final    | Original |          |          |          |          |          |        |        |                 |               | ত্র               | Original |                |          |        |          |                |                 |              |  |
| 這        | jř       | 3        |  | ı  |  |              |           |              |           |           |           |                   | 這        | Ĕ        |          | 1        |          |          |          | İ      |        | ľ               |               | Final             | l E      |                |          |        | ļ        |                |                 |              |  |
|          |          |          |  |  | 1  |              |           | 1            |           |           |           |                   |          | 0        |          |          |          |          |          |        | i      |                 |               |                   | 0        |                |          | -      |          |                |                 |              |  |
|          |          | v        | 1  |  | Ī  | Т            | T         | T            | 丁         |           |           |                   |          | 51       |          |          |          |          |          | $\top$ |        | T               | 1             |                   | 101      |                |          | T      | +-       | 十              | <del> </del>    | 一            | t  |
|          | 2        | Π        | T  |  |  |              |           | T            |           |           |           |                   |          | 52       | Ī        |          |          |          |          |        | _      |                 |               |                   | 102      | П              |          |        | 十        | $\top$         | T               | †            | +  |
|          | 3        | Π        | T  |  |  | T            |           | 1            |           | T         |           |                   |          | 53       |          |          |          |          |          | $\top$ |        |                 | 1:::::        |                   | 103      |                |          | 1      | 十        | +              | 1               | 1            | $\dagger$  |
|          | 4        | Т        | T  |  | Τ  | T            | T         | T            |           |           |           |                   |          | 54       |          |          |          |          | $\Box$   | ┰      | $\top$ | T               | 1             |                   | 104      | H              |          | $\top$ |          | $\top$         | +               | $\vdash$     | $^{\dagger}$                                       |
|          | 5        | П        |  | Τ  | T  | 1            |           | T            |           | T         |           |                   |          | 55       |          | П        |          |          |          |        |        |                 | 1             |                   | 105      |                |          | ╅      | -        | +              | T               | $\vdash$     | $^{+}$   |
|          | 6        | 1        | 1  |  | T  | _            | T         | T            |           | T         |           |                   |          | 56       |          |          |          |          |          | $\top$ |        | +-              |               | ·                 | 106      |                |          | $\top$ | +        | +              | +               | t            | +  |
|          | 7        | T        | Τ  | 1  | T  |              |           | 1            |           |           | _         |                   |          | 57       |          |          | _        |          |          | ┪      | ~      | 1               |               | <u> </u>          | 107      |                |          | T      | -        | +-             | +               | t            | +  |
|          | 8        | 1        |  | 1  | $\top$   | Т            |           | T            |           | $\exists$ |           |                   |          | 58       |          |          |          |          |          | _      | 1      | T               |               |                   | 108      |                |          | $\top$ | +        | $\dagger$      |                 | t            | +  |
|          | 9        | V        | 1  |  | T  | $\top$       |           | T            | 7         |           |           |                   |          | 59       |          | П        |          |          |          | $\top$ | ┪-     | 1               |               |                   | 109      |                | $\neg$   | o      | T        | +-             | $\top$          | 一            | +  |
|          | 10       |          | 1  | T  | Т  | 1            |           | ı            |           |           |           |                   |          | 60       |          |          |          |          |          | $\top$ | +-     | İ               |               |                   | 110      |                |          | +-     | $\top$   | T              | T               | $\vdash$     | ╁  |
|          | 11       |          | Т  | 1  | Т  | 1            | ┰         | T            |           | 1         |           |                   |          | 61       |          |          |          |          |          | _      |        | <b>-</b>        | l             |                   | 111      |                | $\neg$   | +      | +        | T              | +               | f            | T  |
|          | 12       |          | 1  |  | İ  | ľ            |           | T            | $\top$    | _         | $\neg$    |                   |          | 62       |          |          |          |          |          |        | ┪      | 1               |               |                   | 112      |                | $\top$   | ╁      | $^{+}$   | +              | ╁               | $\vdash$     | $\vdash$   |
|          | 13       |          |  |  |  | T            | T         | ┰            |           |           |           |                   | •        | 63       |          |          |          |          |          | $\neg$ |        | T               |               |                   | 113      |                |          | $\top$ | 十        | +              | T               |              | $t^{-}$  |
|          | 14       |          | T  |  | Τ  | T            | $\top$    | $\top$       | $\top$    | 7         | $\exists$ |                   |          | 64       |          |          |          |          | $\dashv$ | $\top$ | 1      | T               |               |                   | 114      |                |          | $\top$ | +        | +-             | 1               | $\vdash$     | $\vdash$   |
|          | 15       | -        |  | T  | 1  | 1            | 1         | $\top$       | T         | 7         | $\exists$ |                   |          | 65       |          |          |          |          | $\dashv$ | +      | +-     | T               |               | -                 | 115      | $\vdash$       | +        | +      | $\top$   | +              | $\top$          | $\vdash$     | <del>                                      </del>  |
|          | 16       |          |  |  | 1  | T            | T         | ┪            |           | 十         |           |                   |          | 66       |          |          |          |          | $\dashv$ |        |        |                 |               |                   | 116      |                | $\pm$    | +      |          |                | +               | ┢            | <del> </del>                                       |
|          | 17       |          | T  |  | 1  | T            | Ť         | +            | $\top$    | 1         | ヿ         |                   |          | 67       |          | $\Box$   | _        | $\dashv$ | 十        | +      | $\top$ | <b>†</b>        |               |                   | 117      | $\dashv$       |          | +      | +        | 1              |                 | <del> </del> | ╁  |
|          | 18       |          |  | $\dagger$  | T  | 十            | $\top$    | +            | 十         | 十         | _         |                   |          | 68       |          | $\vdash$ |          | $\dashv$ | $\neg$   | ┰      | +      | T               |               |                   | 118      | $\dashv$       |          | +      | +-       | +              | -               | ├            | ╁  |
|          | 19       |          | T  | T  | 1  | $^{\dagger}$ | $\top$    | $\dagger$    | +         | +         |           |                   |          | 69       |          | -        |          |          |          | +      | +-     | +               |               |                   | 119      | $\dashv$       | $\pm$    | +      | +        | +-             | $\vdash$        | $\vdash$     | ╁╌   |
|          | 20       |          | T  | †  | t  | T            | +         | $\top$       | 十         | _         | $\dashv$  |                   |          | 70       |          |          |          |          |          | +      | +      | +               |               |                   | 120      | +              | +        | +-     | ╌┼╌      | ╁              | ╁               | ⊢            | $\vdash$   |
|          | 21       |          | +-   | 1-   | T  | t            | Ť         | $^{+}$       | $\top$    | $\top$    |           |                   |          | 71       |          |          | -        |          | $\dashv$ | +      | +      | +-              |               |                   | 121      |                | +        | +      | ┰        | ╁              | +-              | ⊢            | ╆  |
| -        | 22       |          | T  | †-   | T  | $^{+}$       | $\top$    | +            | -         | +         |           |                   |          | 72       |          | $\dashv$ |          | $\dashv$ | -        |        | +      | +               |               |                   | 122      | $\dashv$       | +        | +      | +        | +              | 1               | ├            | ⊢  |
|          | 23       |          | $\vdash$   | $\vdash$   | T  | +            | +         | $^{\dagger}$ | $\forall$ | Ť         | $\exists$ |                   |          | 73       |          | $\vdash$ |          |          | +        | +      | +      |                 |               |                   | 123      | _              |          | +      | +        | +              |                 |              | ╁─   |
|          | 24       |          | $\vdash$   | $\vdash$   | 1-   |              | T         | +            | $^{+}$    | 1         | ᅥ         |                   |          | 74       | Н        |          |          |          | -        | +      |        | ╁               |               |                   | 124      |                | _        | ╁      | ╁        | ╁              | ┼               | $\vdash$     | ⊢  |
|          | 25       |          |  | 1  | 1  | †            | +         | +            |           | 1         | $\dashv$  | ì                 |          | 75       | $\Box$   | -        |          | $\neg$   |          | +      | +      | T               |               |                   | 125      |                |          | +      | +        | ╁              |                 | _            | -  |
|          | 26       |          |  | Г  | T  | 1-           | $\dagger$ | Ť            |           | 十         | $\dashv$  |                   |          | 76       | $\vdash$ | $\dashv$ |          | $\dashv$ | _        |        | +      | <del> </del>    |               |                   | 126      | -+             | $\dashv$ | +      | +        | +              | ┼               |              | ┢  |
|          | 27       |          | <del> </del>                                     | 1  | T  | ┿            | $\dagger$ | T            | $\dagger$ |           | $\dashv$  |                   |          | 77       |          | $\dashv$ | _        |          | $\dashv$ | +      |        | +               |               |                   | 127      | -+             | $\dashv$ | +      | + -      | +              |                 |              | ┢  |
|          | 28       |          |  | <del>                                     </del> | $\top$   | T            | _         | +            | $\top$    | +         | $\dashv$  | iii b             |          | 78       |          | -        | $\dashv$ | $\dashv$ |          | ╁      | +      |                 |               |                   | 128      | -              |          | ╁      | +-       | +              | ┢               |              |  |
|          | 29       |          | T  | <del> </del>                                     | t-   | t            | +         | +            | +         | $\top$    |           |                   |          | 79       |          |          | $\dashv$ | $\dashv$ |          | +      | +-     | t –             |               |                   | 129      | <del>- f</del> |          | ╁      | +        | +-             | ╁               | $\vdash$     | ├  |
|          | 30       |          | $\vdash$   | <u> </u>   | t  | H            | 十         | +            | $\pm$     | $^{+}$    |           |                   |          | 80       | $\dashv$ | 7        | $\dashv$ | _        |          | +      | +      | $\vdash$        | 1             |                   | 130      | _              | +        | +      | ╁        | +-             | ┼─              | H            | ⊢  |
|          | 31       |          | $\vdash$   |  |  | t            | +         | +            |           | +         | $\exists$ | H                 |          | 81       |          | -        | _        | 7        | $\dashv$ | +-     | +      | +               | :::: <b>}</b> |                   | 131      | $\dashv$       | +        | +      | +        | +              | $\vdash$        | -            | $\vdash$   |
|          | 32       |          |  | t  | $\vdash$   | 1-           | +         | ╅            | $^{+}$    | +         | -         |                   |          | 82       | $\dashv$ | $\dashv$ | -        | -        | +        | +-     | +      | ╁╼╌┤            |               |                   | 132      |                | +        | ╁      | +        | +              | $\vdash$        | <del></del>  | ├─   |
|          | 33       |          | <del>                                     </del> | $\vdash$   | $\vdash$   | +            | +         | +            | +         | +         | $\dashv$  |                   |          | 83       |          | $\dashv$ |          | $\dashv$ | +        |        | ╁      | $\vdash$        | 1             |                   | 133      | $\dashv$       | +        | +      | +-       | +              | H               |              | <del> </del>                                       |
|          | 34       |          | †  | <del>                                     </del> | T  | T            | +-        | +            | +         | +         | $\dashv$  |                   |          | 84       | $\dashv$ | -+       | _        | -+       | $\dashv$ | ╅      | +      | ╁               |               |                   | 134      | $\dashv$       |          | ╁      | +        | +              | <del> </del>    | Н            | -  |
|          | 35       |          | $\vdash$   | <u> </u>   | 1  |              | +-        | +            | +         | - -       | $\dashv$  | ii l              |          | 85       | $\dashv$ | -        | $\dashv$ | +        | +        | +      | +      | $\vdash$        |               |                   | 135      | $\dashv$       | +        | +-     | +        | +              |                 | H            | $\vdash$   |
|          | 36       |          |  | <u> </u>   | t  | t            | +         | ╁            | +         | +         | $\dashv$  | iii)              |          | 86       | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | +        | +      | +-     | Н               | <b>}</b>      |                   | 136      | $\dashv$       | $\dashv$ | +      | +        | +              | $\vdash$        |              | $\vdash$   |
|          | 37       | _        | <u> </u>   |  | $\vdash$   | †-           | $\top$    | t            | +         | +         | $\dashv$  |                   |          | 87       | $\dashv$ | $\dashv$ | +        | $\dashv$ | +        | +      | +      | $\vdash$        | :::i}         |                   | 137      | +              | +        | +      | +        | +              | $\vdash$        | $\vdash$     | $\vdash$   |
|          | 38       |          | <del>                                     </del> | $\vdash$   | $\vdash$   | +            | +-        | $^{+}$       | +         | +         | $\dashv$  | t                 |          | 88       |          | $\dashv$ | -+       | -        | +        | +      | +      | $\vdash$        | <b> </b>      |                   | 138      | -              | +        | +      | +        | ╁              | $\vdash$        |              | -  |
|          | 39       |          | $\vdash$   | <del>                                     </del> | t  | t            | +         | $^{+}$       | +         | +         | -         | ŀ                 |          | 89       |          | $\dashv$ | ᅱ        |          | +        | +      | +-     | $\vdash$        | ŀ             | $\longrightarrow$ | 139      | +              |          | +      | +        | +              | $\vdash$        | -            | <del>  -                                    </del> |
|          | 40       |          | $\vdash$   |  | <del> </del>                                       | +            | +         | +            | +-        | +         | $\dashv$  | :::  <del> </del> | -+       | 90       | $\dashv$ | $\dashv$ | +        | $\dashv$ | +        | +      | +      | $\vdash$        | ŀ             |                   | 140      | $\dashv$       | +        | -      | +        | +-             | $\vdash$        | $\dashv$     | <del> </del>                                       |
|          | 41       |          | $\vdash$   |  |  | +-           | +-        | +            | +         | +         | -         | iii b             |          | 91       | +        | $\dashv$ |          | $\dashv$ | +        | +-     | +      | ┝┥              | I             | -                 | 141      | $\dashv$       |          | +      | +        | $\vdash$       | Н               | -            | <u> </u>   |
| 1        | 42       |          | H  | <del> </del>                                     | $\vdash$   | $\vdash$     | +         | +            | +         | +         | $\dashv$  | ŀ                 |          | 92       |          | +        | $\dashv$ | $\dashv$ | +        | +      | +-     | $\vdash$        | - }           |                   | 142      | +              |          | +      | +        | +              | Н               | $\dashv$     | r—   |
|          | 43       | _        |  |  |  | +-           | +         | $^{+}$       | +         | +         | $\dashv$  | ŀ                 |          | 93       | $\dashv$ | $\dashv$ |          | $\dashv$ | +        | +      | +      | $\vdash \vdash$ | ŀ             |                   | 143      | +              | +        | +      | +        | $\vdash$       | Н               |              | _  |
|          | 44       | _        | <del> </del>                                     | $\vdash$   | $\vdash$   | +            | +         | +            | +         | +-        | $\dashv$  | ŀ                 |          | 94       | $\dashv$ | $\dashv$ | $\dashv$ | -+       | +        | ╁      | +      | $\vdash\vdash$  | ŀ             |                   | 144      | +              | +        | +      | +        | +              | Н               |              |  |
| -+       | 45       | _        | <del>                                     </del> | $\vdash$   | H  | +            | +         | +            | +         | +         | $\dashv$  | ŀ                 |          | 95       | $\dashv$ |          | -        | $\dashv$ | +        | +      | +      | <del> </del>    | :::: -        |                   | 144      | $\dashv$       | +        | +      | +        | $\vdash$       | $\vdash$        | $\dashv$     |  |
| $\dashv$ | 46       |          | $\vdash$   |  | <del>  -                                    </del> | $\vdash$     | +-        | +            | +         | +         | $\dashv$  | ŀ                 |          | 96       | $\dashv$ | $\dashv$ | $\dashv$ | -+       | +        | +-     | +      | $\vdash$        | ::::          |                   | 145      |                | +        | +      | $\vdash$ | <del> </del>   | $\vdash$        |              | _  |
|          | 47       | -        | $\vdash$   |  | $\vdash$   | $\vdash$     | +         | ╁            | +         | +         | $\dashv$  | ŀ                 |          | 97       |          | +        | -        | -+       | +        | +-     | +      | $\vdash$        |               |                   | 146      | +              | +        | +      | +        | <del> </del> — |                 |              | -  |
|          | 48       |          | $\vdash$   |  | -  | $\vdash$     | +         | +            | +         | +         |           | ŀ                 | $\dashv$ | 98       |          | -        | $\dashv$ | $\dashv$ | +        | +      | +      |                 | -             |                   | 147      | -+             |          | +      | _        | <b>├</b>       | $\vdash \vdash$ |              |  |
|          | 49       | _        | -  | -  | <del> </del>                                       | ├-           | +         | +            | ╁         | +         | 4         | -                 |          | 98       | $\dashv$ |          |          | $\dashv$ | +        | +      | +      | Н               | H             |                   | 148      | +              |          | +      | ╂        | -              | $\sqcup$        | $\dashv$     |  |
|          | 50       | _        | -  |  | -  | H            | ╁         |              |           | +         |           | -                 |          | 100      | $\dashv$ |          | -        | $\dashv$ | +        | +      | +      | Н               | -             |                   | 149      | _              |          | +      | ╀        | ₩              | $\vdash$        | _            |  |
|          | อบ       |          | ı  | l .  | i  | ı            | 1         | 1            | - 1       | - 1       | - 10      |                   | - 1      | 100 l    | - 1      | - 1      | - 1      | - 1      | - 1      | - 1    | 1      | ıl              | ::::          |                   | 150      | 1              | 1        | 1      | 1        | 1              |                 | - 1          |  |